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NASA Procedural Requirements

COMPLIANCE IS MANDATORY**NPR 1080.1A**
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Request Notification of Change

 (NASA Only)**Subject: Requirements for the Conduct of NASA Research and Technology (R&T)****Responsible Office: Science Mission Directorate**[| TOC](#) | [Preface](#) | [Chapter1](#) | [Chapter2](#) | [Chapter3](#) | [Chapter4](#) | [Chapter5](#) | [Chapter6](#) | [AppendixA](#)
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Chapter 4. R&T Quality Assessment and Performance Measurement Metrics

4.1 Overview

4.1.1 The cognizant MDAA or MSOD is responsible for conducting quality and performance assessments of each R&T program, using the reviews required by NPR 7120.8, NASA Research and Technology Program and Project Management Requirements. Additional mechanisms as described in this Chapter are also used by NASA to assess the quality and performance of R&T investments.

4.2 Assessment

4.2.1 Program Leads of R&T programs shall demonstrate the extent to which their programs meet the following criteria:

- a. Relevance - R&T programs shall be able to articulate why this investment is important, relevant, and appropriate and have well-conceived plans that identify program goals, priorities and linkages to national and stakeholder/beneficiary needs.
- b. Quality - R&T programs shall justify how funds will be allocated to ensure quality R&T.
- c. Performance - R&T programs shall establish plans and management processes to monitor and document performance, including appropriate outcome measures and milestones that can be used to track progress toward goals, and assess whether funding is to be enhanced or redirected.

4.2.2 NASA demonstrates compliance with these criteria in the Integrated Budget and Performance Document (IBPD) utilizing the results from status reviews and independent assessments required by NPR 7120.8, NASA Research and Technology Program and Project Management Requirements. NASA internal reviews of R&T programs include annual program and project level assessments at NASA Centers, contractor sites, and NASA Headquarters. For external review of R&T programs, NASA relies on peer review panels of R&T experts from outside NASA to conduct quality and performance assessments.

4.3 Performance Measurement

4.3.1 Governmentwide mandates, such as the Government Performance and Results Act (GPRA) and the Program Assessment and Rating Tool (PART), are also used to measure the performance of NASA R&T programs. Each MD or MSO that solicits, selects, funds, and conducts R&T is responsible for maintaining statistics on this process for their respective R&T programs. These statistics are reported annually as part of GPRA reporting (Section 4.3.2) and the Performance Assessment and Rating Tool (Section 4.3.3). Because the outcome of R&T may be difficult to

evaluate on a short-term basis, a retrospective assessment covering the previous 3 to 5 years may be used to provide a more complete and accurate indicator with respect to the quality, relevance, and performance of the R&T investment. Evaluating the inputs provided, the outcomes achieved, and the value of those outcomes to the R&T community determines performance measurements for R&T investments.

4.3.2 The GPRA requires the following activities: an Agency-level strategic plan that sets goals and objectives, an annual performance plan that translates goal into annual targets, and an annual performance report that demonstrates whether targets are met. Each MD or MSO submits a report on annual performance goals, based on its strategic plans, for internal NASA review by Program Analysis and Evaluation (PA&E) and the Office of Management and Budget (OMB) before it is sent to Congress as mandated by GPRA.

4.3.3 The PART is a systematic method of assessing the performance of program activities across the Federal Government. OMB uses PART assessments to help link performance to budget decisions and to provide a basis for making recommendations to improve program results. NASA applies the PART to individual R&T Programs and OMB assesses each Program fully once every three years. Results of PART assessments, including OMB recommendations for improvement, are published each year with the President's budget request.

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